

Having thus described the preferred embodiment, the invention is now claimed to be

1. A method of displaying information within a three-dimensional workspace on a computer display, said method comprising:

5 partitioning the workspace into a plurality of layers, where each layer corresponds to a display depth relative to a user;

displaying at least one substantially opaque container object at a first display depth;

10 providing to the user a pointer operative to select objects within the three-dimensional workspace at a plurality of display depths; and

responsive to the user selecting a container object,

reducing an opacity level of the selected container object in order to reveal at least one content object contained therein, and

15 displaying the at least one content object contained within the selected container object at a deeper display depth relative to the first display depth.

2. The method as set forth in claim 1, wherein reducing the opacity of the selected container object includes:

20 determining a desired opacity level of the selected container object, selecting a dither pattern corresponding to the desired opacity level, and replacing pixels corresponding to the container object with pixels corresponding to the at least one content object in accordance with the selected dither pattern.

25 3 The method as set forth in claim 1, further comprising responsive to the user selecting a container object, prompting the user for a password corresponding to the selected container object.

30 4. The method as set forth in claim 3, wherein each container object is selectively accessible by providing a different password.

5 The method as set forth in claim 1, wherein the providing step includes.

receiving a control signal indicating a user preference for one of (i) a two-dimensional pointer operative to select objects at the first display depth, and (ii) a
5 three-dimensional pointer operative to select objects at the plurality of display depths

6. The method as set forth in claim 5, further including.
dynamically adjusting the size of the three-dimensional pointer based upon the layer being accessed by the user, such that the three-dimensional pointer is
10 larger at the first display depth and smaller at the plurality of display depths

7. A computer system for displaying information within a three-dimensional workspace, said system comprising:
means for displaying a container object at (i) a first display depth and
15 (ii) a first opacity level,
means for displaying content objects at a plurality of display depths that are deeper than the first display depth,
a multi-mode object selection device operative to select (i) container objects at the first display depth and (ii) content objects at deeper display depths, and
20 means responsive to a user selection for adjusting the opacity level of the selected container object to reveal the content objects contained therein

8 The computer system according to claim 7, wherein the display means includes a LC display.
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9. The computer system according to claim 7, wherein the display means include a CRT monitor

10 The computer system according to claim 7, further comprising
30 a Z-buffer for storing (i) a number of layers for each container and content object, where each layer corresponds to a relative display depth, and (ii) a location for data associated with each layer of each container and content object; and

a frame buffer for storing composited data for each layer corresponding to all container object data and content object data within said layer

5 11. The computer system according to claim 7, further comprising means for dynamically adjusting a size of the multi-mode object selection device based upon the display depth in which the user selects an object, such that the size of the multi-mode selection device is greater at the first display depth than at the deeper display depths

10 12. In a computer system having a visual display system operating in conjunction with a visual display screen, a computer-implemented method of presenting a three-dimensional workspace having depth perception on the display screen, said method comprising:

15 displaying a plurality of substantially opaque pictorial objects at a first display depth perceived to be proximate the display screen, providing to the user a three-dimensional cursor operative to navigate within the three-dimensional workspace; and, responsive to the user selecting one of the substantially opaque pictorial objects,

20 reducing an opacity level of the selected substantially opaque pictorial object; and displaying at least one graphical object at a deeper display depth relative to the first display depth

25 13. The method as set forth in claim 14, wherein reducing the opacity level of the selected substantially opaque pictorial object includes replacing pixels from the substantially opaque pictorial object with pixels from the graphical object contained therein in accordance with a predetermined dither pattern.

30 14. The method as set forth in claim 14, further including

adjusting the size of the three-dimensional cursor based upon the display depth at which the user is navigating